



UNITED STATES PATENT AND TRADEMARK OFFICE

m

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,537	11/13/2003	David Charles Boucher	ROC920030208US1	9180
46296	7590	05/16/2007		
MARTIN & ASSOCIATES, LLC			EXAMINER	
P.O. BOX 548			SEYE, ABDOU K	
CARTHAGE, MO 64836-0548				
			ART UNIT	PAPER NUMBER
			2194	
			MAIL DATE	DELIVERY MODE
			05/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,537	Applicant(s) BOUTCHER ET AL.	
	Examiner Abdou Karim Seye	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial office action based on the application filed on November 11, 2003. Claims 1-42 are currently pending and have been considered below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6 and 12 are non statutory. The claimed system comprising of operating system and a pause/resume mechanism in memory are considered as software program containing machine-executable instructions, per se (and not associated with any physical structure). See MPEP 2106.01 - I: "...computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized...".

Claims 7-11 are also rejected for failing to remedy the deficiencies of the above rejected non statutory claim 6.

Art Unit: 2194

Claims 25, 32 and 40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly, by claiming a media and the specification recites evidence where the computer storage media is defined as a "wave" (such as a carrier wave).

The specification in this instance (see page 9, lines 3-8) provides intrinsic evidence in the form of examples of items considered to fall within the broadest reasonable interpretation of computer-readable medium. These examples include computer storage media and communication media. While the computer storage media would establish a statutory category of a machine or manufacture, the communication media include forms of energy (e.g., data signals and carrier waves) and media (e.g., a wire) which are not functionally or structurally interconnected with the instructions in such a manner as to enable the instructions to act as a computer component and realize any functionality they may possess. Thus, the claims are directed to a form of energy that, at present, the office consider to be non-statutory subject matter.

Claims 26-31, 33-39 and 41-42 are also rejected for failing to remedy the deficiencies of the above rejected non statutory claims 25, 32 and 40.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

Art Unit: 2194

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by

Oyamada et al. (US 6802062).

Claims 1, 6, 12, 13, 18, 24, 25, 32 and 40, Oyamada teaches, a method, product and apparatus comprising: at least one processor (FIG. 11); a memory coupled to the at least one processor (FIG. 11); a pause/resume mechanism residing in the memory and executed by the at least one processor, the pause/resume mechanism (FIG. 1: 214 and 234; a suspension and restart means; col. 8, lines 26-67 and col. 9, lines 1-5 and col. 10, lines 27-67 and col. 11, lines 1-55) sending a pause message when a first operating system (FIG. 1: 226; VM of virtual machine system 22) needs to be restarted to at least one other operating system (FIG. 1: 204; OS) that is using a shared resource (FIG. 11; virtual resource including memory, processors and input/output units) that is also used by the first operating system, the pause/resume mechanism sending a resume message (col. 9, lines 1-30; confirmation of input/output operation

Art Unit: 2194

started successfully) to the at least one other operating system after the first operating system is restarted.

Claim 2, Oyamada teaches,

wherein the pause/resume mechanism receives a pause complete message from each other operating system to indicate each other operating system has completed pending accesses to the shared resource(col. 9, lines 1-5; confirmation of input/output operation is complete).

Claim 3, Oyamada teaches,

wherein the pause/resume mechanism disconnects the first operating system from the second operating system before the first operating system is restarted (FIG. 1: 215; suspension possibility judging means; col. 9, lines 1-30).

Claim 4, Oyamada teaches,

wherein the pause/resume mechanism reconnects the first operating system to the at least one other operating system after the first operating system is restarted (FIG. 1: 236; operation restarting means; col. 11, lines 12-35).

Claim 5, Oyamada teaches,

Art Unit: 2194

wherein the resume message indicates that the first operating system is ready to resume sharing the shared resource with the at least one other operating system (FIG. 4, col. 5, lines 55-67 and col. 6, lines 1-22).

As per claims 7-11, 14-17, 19-23, 28-31, 35-39 they are rejected for the same reasons as the claims above.

As per claims 26-27, 33-34 and 41-42, see rejections of the claims above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

Traut et al (20020099532) discloses a system and method for the logical substitution of processor control in an emulated computing environment.

Brice, Jr et al (6681238) discloses a method and system for providing a hardware machine function in a protected virtual machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Abdou Seye whose telephone number is (571) 270-1062. The examiner can normally be reached Monday through Friday from 7:30 a.m. to 4:00 p.m.

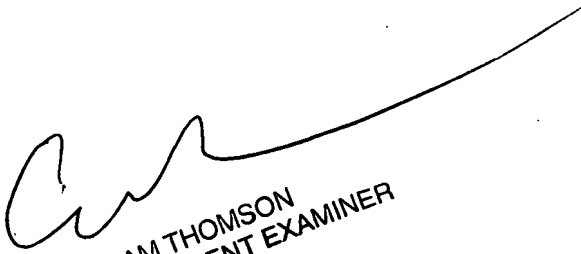
Art Unit: 2194

If attempts to reach the examiner by telephone are unsuccessful, contact the examiner's supervisor, William Thomson at (571) 272-3718. The fax phone number for formal or official faxes to Technology Center 3600 is (571) 273-8300.

Draft or informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 273-6722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-3600.

AKS
May 04, 2007



WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER